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Environmental labels and declarations — Type I environmental labelling — Principles and procedures

Labels et déclarations environnementaux — Délivrance du label environnemental de type I — Principes et procédures

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Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 3, *Environmental labelling*.

This second edition cancels and replaces the first edition (ISO 14024:1999), which has been technically revised.

The main changes compared to the previous edition are as follows:

— addition of definitions for "verifier" (3.15) and "verification" (3.16);

— addition of subclauses on data quality (5.11) and the competence of verifiers (5.16);

— addition of paragraph on the competence of verifiers in 6.1;

— addition of subclause 7.4.5 on verification;

— updating of reference documents.

Introduction

There are several approaches to environmental labelling. This document relates to Type I environmental labelling programmes, which award their environmental label to products that meet a set of predetermined requirements. The label identifies products that are determined to be environmentally preferable within a particular product category.

Type I environmental labelling programmes are voluntary, can be operated by public or private agencies and can be national, regional or international in nature.

Environmental labels and declarations — Type I environmental labelling — Principles and procedures

1 Scope

This document establishes the principles and procedures for developing Type I environmental labelling programmes, including the selection of product categories, product environmental criteria and product function characteristics, and for assessing and demonstrating compliance. This document also establishes the certification procedures for awarding the label.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14020, *Environmental labels and declarations — General principles*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
Type I environmental labelling programme
voluntary, multiple-criteria-based *third party* (3.7) programme that awards a *licence* (3.13) which authorizes the use of environmental labels on *products* (3.2) indicating overall environmental preferability of a product within a particular *product category* (3.3) based on life cycle considerations

[SOURCE: ISO 14050:2009, 8.3]

3.2
product
any goods or service

[SOURCE: ISO 14050:2009, 6.2, modified — Notes to entry have been deleted.]

3.3
product category
group of *products* (3.2) which have equivalent function

[SOURCE: ISO 14050:2009, 8.3.3]

3.4
product environmental criteria
environmental requirements that the *product* (3.2) shall meet in order to be awarded an environmental label

[SOURCE: ISO 14050:2009, 8.3.3.3]

3.5
product function characteristic
attribute or characteristic in the performance and use of a *product* (3.2)

[SOURCE: ISO 14050:2009, 8.3.3.2]

3.6
ecolabelling body
third party (3.7) body, and its agents, which conducts a *Type I environmental labelling programme* (3.1)

[SOURCE: ISO 14050:2009, 8.3.4]

3.7
third party
person or body that is recognized as being independent of the parties involved, as concerns the issue in question

Note 1 to entry: "Parties involved" are usually supplier ("first party") and purchaser ("second party") interests.

[SOURCE: ISO 14050:2009, 3.7]

3.8
interested party
party affected by a *Type I environmental labelling programme* (3.1)

3.9
licensee
party authorized by an *ecolabelling body* (3.6) to use a Type I environmental label

[SOURCE: ISO 14050:2009, 8.3.2]

3.10
environmental aspect
element of an organization's activities or *products* (3.2) that interacts or can interact with the environment

Note 1 to entry: An environmental aspect can cause (an) *environmental impact(s)* (3.11). A significant environmental aspect is one that has or can have one or more significant environmental impact(s).

Note 2 to entry: Significant environmental aspects are determined by the organization applying one or more criteria.

[SOURCE: ISO 14001:2015, 3.2.2, modified — The words "or services" have been deleted.]

3.11
environmental impact
change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's *environmental aspects* (3.10)

[SOURCE: ISO 14001:2015, 3.2.4]

3.12
certification
procedure by which a *third party* (3.7) gives written assurance that a *product* (3.2) or process conforms to specified requirements

[SOURCE: ISO 14050:2009, 3.10, modified — The words "a product, process or service" have been replaced by "a product or process".]

3.13
licence (for Type I environmental labelling)
licence
document, issued under the rules of a *certification* (3.12) system, by which an *ecolabelling body* (3.6) grants to a person or body the right to use Type I environmental labels for its *products* (3.2) in accordance with the rules of the environmental labelling programme

[SOURCE: ISO 14050:2009, 8.3.1, modified — Second term "licence" has been added, and the words "or services" have been deleted in the definition.]

3.14
fitness for purpose
ability of a *product* (3.2) or process to serve a defined purpose under specific conditions

[SOURCE: ISO 14050:2009, 8.3.3.1, modified — The words "a product, process or service" have been replaced by "a product or process".]

3.15
verifier
person or body that carries out *verification* (3.16)

[SOURCE: ISO 14050:2009, 5.3]

3.16
verification
confirmation, through the provision of objective evidence, that specified requirements have been fulfilled

[SOURCE: ISO 14050:2009, 5.1]

4 Objective of Type I environmental labelling

The overall goal of environmental labels and declarations is to encourage, through communication of verifiable and accurate information that is not misleading on environmental aspects of products, the demand for and supply of those products that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

The objective of Type I environmental labelling programmes is to contribute to a reduction in the environmental impacts associated with products, through the identification of products that meet the criteria of a specific Type I programme for overall environmental preferability.

The objective of this document is to secure transparency and credibility in implementing Type I environmental labelling programmes and to harmonize the principles and procedures applicable to the programmes.

5 Principles

5.1 Voluntary nature of the programme

Type I environmental labelling programmes, including those developed or operated by government-sponsored agencies, shall be voluntary in nature.

5.2 Relationship with ISO 14020

In addition to the requirements of this document, the principles set out in ISO 14020 shall apply. Where this document provides for more specific requirements than ISO 14020, those specific requirements shall apply.

5.3 Use of ecolabels

Use of an ecolabel in accordance with this document is considered to indicate meeting all environmental and other relevant legal requirements.

5.4 Life cycle consideration

The objective of reducing environmental impacts and not merely transferring impacts across media or stages of the product life cycle is best served by considering the whole product life cycle when setting product environmental criteria.

Life cycle stages to be taken into account when developing the product environmental criteria should include extraction of resources, manufacturing, distribution, use and disposal relating to relevant cross-media environmental indicators. Any departure from this comprehensive approach or selective use of restricted environmental issues shall be justified.

5.5 Selectivity

Product environmental criteria shall be established to differentiate environmentally preferable products from others in the product category, based on a measurable difference in environmental impact. Product environmental criteria should differentiate between products only when these differences are significant. Testing and verification methodologies used to evaluate products have different levels of precision and accuracy. This should be considered when determining the significance of this difference.

Once product environmental criteria are established according to the above, all products that meet the criteria shall be eligible to use the label.

5.6 Product environmental criteria

5.6.1 Life cycle considerations

The product environmental criteria shall be based on indicators arising from life cycle considerations (see 6.4).

5.6.2 Basis of criteria

The product environmental criteria should be set at attainable levels and should give consideration to relative environmental impacts, measurement capability and accuracy.

5.7 Product function characteristics

In developing the criteria, the fitness for purpose of the product and the levels of performance shall be taken into account. International, regional or national standards for the product should be considered for use in the programme, according to the hierarchy for use of standards set out in ISO 14020.

NOTE In the context of environmental labelling, fitness for purpose implies that a product satisfies health, safety and consumer performance needs.

5.8 Validity of programme requirements

5.8.1 Period of validity

The product environmental criteria and product function requirements for each product category shall be set for a predefined period.

5.8.2 Review period

The product environmental criteria and product function requirements shall be reviewed within a predefined period, taking account of factors such as new technologies, new products, new environmental information and market changes. Review of the product environmental criteria and product functional requirements need not necessarily lead to changes in them.

5.9 Consultation

A process of formal open participation among interested parties shall be established at the outset for the purpose of selecting and reviewing product categories, product environmental criteria and product function characteristics.

5.10 Compliance and verification

All the elements in the product environmental criteria and product function characteristics of the environmental labelling programme shall be verifiable by the ecolabelling body. The methods for assessing compliance should make use of the following, in order of preference:

— ISO and IEC standards;

— other internationally recognized standards;

— regional and national standards;

— other repeatable and reproducible methods which follow accepted principles of good laboratory practice (see ISO/IEC 17025 for information on good laboratory practice);

— manufacturer's evidence.

5.11 Data quality

The ecolabelling body shall require data that reduce bias and uncertainty as far as practical by requiring the best quality data available. Data quality shall be characterized by both quantitative and qualitative aspects and the source of data shall be specified in the criteria requirements whenever possible.

5.12 Transparency

A Type I environmental labelling programme should be able to demonstrate transparency through all stages of its development and operation. Transparency implies that information shall be available to interested parties for inspection and comment where appropriate. Adequate time shall be allowed for comments to be submitted. This information should include:

— selection of product categories;

— selection and development of product environmental criteria;

— product function characteristics;

— testing and verification methods;

— certification and award procedures;

— the review period;

— the period of validity;

— non-confidential evidence on which the awarding of the label is based;

— funding sources for the programme development (e.g. fees, government financial support);

— compliance verification.

Transparency should not conflict with the requirements of 5.16.

5.13 Accessibility

Application to, and participation in, environmental labelling programmes shall be open to all potential applicants. All applicants that fulfil the product environmental criteria for a given product category and the other programme requirements shall be entitled to be granted a licence and authorized to use the label.

5.14 Scientific basis of product environmental criteria

The development and selection of criteria shall be based on sound scientific and engineering principles. The criteria should be derived from data that support the claim of environmental preferability.

5.15 Avoidance of conflict of interest

Type I environmental labelling programmes shall ensure that they are free from undue influence. Programmes shall be able to demonstrate that sources of funding do not create a conflict of interest.

NOTE See also ISO/IEC 17065.

5.16 Competence of verifiers

The ecolabelling body shall establish procedures that include a process to assess and develop the competence of verifiers, e.g. by periodic training. The ecolabelling body shall have a transparent and documented process to manage the verification activity and to provide traceability.

5.17 Costs and fees

Fees may include application, testing or administration fees. In principle, the costs and fees for the granting and maintaining of a label should be based on all programme costs and should be kept as low as possible to maximize accessibility.

Any fees should be applied equitably to all applicants and licensees.

5.18 Confidentiality

The confidentiality of all information that is identified as confidential shall be maintained.

5.19 Mutual recognition

Mutual recognition, based on confidence, should be encouraged. There may be mutual recognition of tests, inspections, conformity assessment, administrative procedures and, where appropriate, product environmental criteria.

To ensure full transparency, information on existing mutual recognition agreements with other ecolabelling bodies shall be made available.

NOTE For further guidance, see ISO/IEC 17040.

6 Procedures

6.1 General

Type I environmental labelling involves an iterative process, which includes:

— consultation with interested parties;

— the selection of product categories;

— development, review and modification of product environmental criteria;

— the identification of product function characteristics;

— the establishment of certification procedures and other administrative elements of the programme.

The establishment of certification procedures shall include establishing the competence of the verifiers, including knowledge of:

— the relevant sector and products within the sector;

— product-related environmental criteria, including the methodology used to develop the criteria;

— the regulatory framework;

— the programme rules for Type I environmental labelling;

— this document and other standards relevant to the verification.

6.2 Consultation with interested parties

The ecolabelling body shall implement a formal consultation mechanism that facilitates full participation of interested parties. Such a mechanism could include the use of selected groups of interested parties' representatives, e.g. consultation board, advisory committee or public hearing.

Consultation is an on-going process that occurs in the selection of the product category, and in the establishment of product environmental criteria and product function characteristics. Interested parties shall be given adequate time and access to details and sources of information used. The consultation process shall also ensure that interested parties that comment on the programme receive proper consideration of and response to, their comments. Reasonable efforts should be made to achieve consensus throughout the process.

6.3 Selection of product categories

6.3.1 Conducting a feasibility study

In this phase of the process, a study should be conducted on potential product categories and the nature of the market. The purpose of the study is to consider the feasibility of establishing the product categories. The study should include:

— the initial selection of possible product categories;

— consultation with interested parties;

— a market survey (e.g. nature, size, demand);

— suppliers in the market place (e.g. small and medium-sized enterprises, foreign and domestic producers);

— environmental impacts of products;

— the potential and need for environmental improvement;

— the definition of the scope of product categories, taking into account equivalence of use and fitness for use, including product function characteristics;

— availability of data;

— current national and international legislation and agreements.

6.3.2 Proposal for product category

Once a feasibility study has been completed, the ecolabelling body is in a position to ascertain which product categories are most likely to obtain marketplace acceptance. A product category proposal should be prepared for the interested parties, which summarizes the components of the feasibility study, its findings and the considerations leading to the proposal of product categories for the programme.

6.4 Selection and development of product environmental criteria

6.4.1 Selection of product environmental criteria

The framework and procedures set out in this document are intended to provide uniformity, while allowing decisions on the final criteria to be the result of the consultation process between the ecolabelling body and interested parties. The criteria shall be selected in accordance with the requirements set out in 5.2 to 5.19.

The matrix in Table 1 is an example of applying this approach and is included to assist ecolabelling bodies to initiate selection of product environmental criteria. The matrix links the stages of the product life cycle with the major environmental input and output indicators. The emission indicators are grouped by media and are usually more than one per medium. The study of the life cycle stages (which may be performed as a further part of the feasibility study given in 6.3.1) could lead to the conclusion that environmental impacts in some stages are insignificant and do not warrant further consideration. The study shall show that the selection of product environmental criteria will not lead to the transfer of impacts from one stage of the life cycle to another, or from one medium to another, without a net gain of environmental benefit.

Table 1 — Typical product environmental criteria selection matrix

Stage of the life cycle	Environmental input/output indicators					
	Energy	Resources	Emission to			Other
	Renewable/ Non-renewable	Renewable/ Non-renewable	Water	Air	Soil	
Resource extraction						
Production						
Distribution						
Use						
Disposal						

6.4.2 Development of product environmental criteria

6.4.2.1 General

The process for establishing the criteria should take into account relevant local, regional, and global environmental issues, available technology and economic aspects.

Product environmental criteria should be expressed in terms of:

— impacts on the environment and natural resources; or

— whenever that is not practicable, environmental aspects, such as emissions to the environment.

Criteria that directly or indirectly require or exclude the use of particular processes or production methods without justification shall be avoided. Any exclusions of certain substances should be based on scientific methodology meeting Principle 3 of ISO 14020. Methods such as risk assessment may provide useful information in this respect.

Some major considerations in this phase of the labelling programme are set out in 6.4.2.2 to 6.4.2.5.

6.4.2.2 Identification of areas most relevant for reduction of environmental impact

The ecolabelling body shall identify the product life cycle stages where there is differentiation of environmental impacts among the products within the category. The ranges and variability of the data obtained for specific products shall be analysed to ensure that the selected product environmental criteria are adequate and reflect the differences among products.

6.4.2.3 Use of qualitative and quantitative indices

The ecolabelling body may consider it proper to apply weighting factors to the selected environmental requirements. The reasons for each weighting factor shall be clearly explained and justified.

6.4.2.4 Determination of numerical values for each relevant criterion

The ecolabelling body shall determine the criteria that most accurately reflect the selected environmental aspects. Once the criteria have been determined, the ecolabelling body shall assign numerical values to them. These values could take the form of minimum values, threshold levels not to be exceeded, a scale-point system or other relevant and appropriate approaches.

6.4.2.5 Determination of test methods, procedures and availability of test laboratories

Testing and verification requirements should be considered in parallel with the preparation of requirements for a given product category. The organizational, technical and economic feasibility of such testing and verification requirements should be carefully considered.

The ecolabelling body should provide a reference to the test methods that are required for any given criterion or characteristic, and should examine the availability of competent laboratories capable of performing the tests. The test methods should be selected according to the guidance given in 5.10.

6.5 Selection of product function characteristics

In the selection of the product function characteristics, due consideration shall be given to product function. This should be addressed in terms of product performance, rather than design or descriptive characteristics.

When establishing product function characteristics, consideration should be given to:

— identification of the product function characteristics;

— selection of key performance elements that characterize function;

— verification that the key performance elements are applicable to all products in the category;

— identifying the necessary levels of performance (see 5.7).

6.6 Reporting and publication

Once the product categories, product environmental criteria and product function characteristics have been established, they shall be published. The selected report format shall be accompanied by information which demonstrates that:

— the establishment of the category, criteria and characteristics is in accordance with the scope, principles, practices and requirements set out in this document;

— the criteria are objective and justifiable;

— methods are available to verify the product environmental criteria and product function characteristics;

— interested parties were given the opportunity to participate in the process and their views were taken into consideration.

The ecolabelling body should also provide information on request that explains the meaning of the label to purchasers and the public.

6.7 Implementation of modifications to the product environmental criteria

In cases where the label has already been awarded to products, there are several of factors that should be considered when establishing the date on which revisions to the criteria will come into force.

These factors include, but are not limited to:

— the urgency of complying with the revised product environmental criteria;

— the extent of the change, the length of time and the level of complexity involved in retooling the manufacturing process to comply with the revised criteria;

— avoidance of unintentional commercial advantage given to a particular manufacturer or to a particular design or process;

— the need to involve the licensee's material suppliers;

— action that needs to be taken with respect to existing products with the label awarded under the old criteria which are still in the chain of supply to the end consumer;

— time for appropriate consultation with licensees;

— complexity of administering the changes for the ecolabelling body;

— legislative requirements.

7 Certification and compliance

7.1 General

Clause 7 sets out general requirements for certification and compliance.

NOTE See also ISO/IEC 17065.

7.2 Basic concepts

7.2.1 General

The prerequisites for awarding the label are normally divided into the elements set out in 7.2.2 and 7.2.3.

7.2.2 General rules

General rules guide the overall operation of the programme. These general rules control the general conditions for the awarding of the licence and the use of the label. The general rules should address, but may not be limited to, the following issues:

— publicity by licensees;

— conditions that could lead to the suspension, cancellation or withdrawal of a licence;

— procedures for implementing corrective action in case of nonconformity;

— procedures for resolution of disputes, procedures for testing and verification, fee structure;

— guidance for the use of logotype.

It is essential that all prerequisites for the awarding of the licence and the use of the label are included in the general rules, in the product environmental criteria and in product function characteristics, because only these requirements can be used as the basis for awarding or withholding the licence to use the label.

7.2.3 Product environmental criteria and product function characteristics for each product category

Product environmental criteria and product function characteristics set out the technical requirement elements of the Type I environmental labelling programme for each product category.

7.3 Licensing

The ecolabelling body is responsible for licensing of applicants. The ecolabelling body shall award a licence to use the label only when it is satisfied that:

— the applicant is in compliance with the general rules of the programme;

— the product is in compliance with the product environmental criteria and product function characteristics applicable to its product category.

The issuing of a licence does not oblige the licensee to use the label.

The ecolabelling body shall maintain a publicly available list of products to which the label has been awarded.

7.4 Procedures for assessing and demonstrating compliance

7.4.1 Basic principle

The methodology for assessing whether a product complies with the product environmental criteria and product function characteristics, and for verifying on-going compliance, shall be documented and shall have sufficient rigour to maintain confidence in the programme.

There may be many factors influencing the choice of compliance procedures and the methodologies may vary from one programme to another.

7.4.2 Supervision and control

The ecolabelling body shall review the programme requirements and, in accordance with the general rules (see 7.2.2), shall determine the appropriate form of verification for each. Once the requirements have been reviewed, a plan of supervision and control shall be prepared.